

91-250601/24 GCSTROI CONCRETE 25.02.88-SU-407251 (30.09.90) C04b-28/08 C04b-38/08 Raw material compsn. for lightweight concrete prodn. - contains slag Portland cement, finely ground slag additive, slag pumice, air- entraining additive, bauxite slurry and water C91-10964	I02 M25 GROSS = 25.02.88 *SU 1595-823-A	L(2-D3) M(25-E1, 25-G1)
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The raw material compsn. contains (in wt.-%): slag-Portland cement 5.9-10.5; finely ground slag additive 21.5.1; slag pumice fraction 5.20 mm 40.9-41.8; slag pumice fraction not greater than 5 mm 28.7-32.4; and air-entraining additive (i.e. a 5:1 pts. wt. mixt. of neutralised air-entraining tar and sulphite-yeast residues in the form of 5% solns.) 0.5/0.8; bauxite slurry from alumina prodn. 1.6-5.9 and water the remainder.

The finely ground slag additive is obtnd. from blast furnaces and it contains (in %): SiO<sub>2</sub> 37.5; Al<sub>2</sub>O<sub>3</sub> 6.7; Fe<sub>2</sub>O<sub>3</sub> 0.4; CaO 44.2; R<sub>2</sub>O (R = alkali metal) 6.7; Ti 2.1; and calcination loss the remainder.

The bauxite slurry is used as an active mineral additive and is obtnd. as a waste prod. in the hydrochemical prodn. of alumina. The slurry comprises (in %): SiO<sub>2</sub> 22.5; Al<sub>2</sub>O<sub>3</sub> 7.2; Fe<sub>2</sub>O<sub>3</sub> 20.8; CaO 39.3; R<sub>2</sub>O 3.5; Ti 0.4; and calcination loss the remainder.

USE/ADVANTAGE - Prepn. of lightweight compsns. config. porous slag fillers for the building industry. The use of the bauxite slurry component reduces the consumption of cement to 115-200 kg/cu.m for concrete grade 'M 50' and increases its resistance in

aggressive media. Bul.38/30.9.90 (4pp Dwg.No.0/0)